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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,474	01/15/2002	Chug-Ming Chen	12781 B	6161

7590 09/27/2004

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EXAMINER

CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,474	CHEN ET AL.	
	Examiner	Art Unit	
	MONZER R CHORBAJI	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a general office action in response to the application filing date of 01/15/2002

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, numbered line 4; applicant uses the term "an ultraviolet LCD." The specification does not provide an explanation or an example of an ultraviolet LCD. Does the applicant mean a UV lamp? Clarification is needed to understand the meaning of claim 1. On page 3, lines 2-4, of the specification; the ultraviolet LCD generates UV rays. Thus, in examining claim 1, the examiner considers an ultraviolet LCD to be equivalent to an ultraviolet lamp.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-4, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et al (US 2002/0098109 A1).

With respect to claim 1, the ('109) reference teaches an air-purifying device (figure 18, 100D) including the following: a casing (figure 18, 112) adapted to be attached (page 14, paragraph 0106. The meaning of the term attach is considered equivalent to join or connect or make a part of in functioning) to an air vent of the vehicle, the casing has a passage between the inlet and the outlet (figure 15, see the directions of the arrows), an ultraviolet lamp located in the passage (figure 15, 36) and the UV lamp is powered by a power supply device (page 11, paragraph 0091) connected to the casing (figure 19, 106).

With respect to claims 3-4, the ('109) reference teaches a button (figure 11, 4 includes unlabeled buttons and dials) on the casing that is electrically connected to the power supply device and a fan located in the outlet of the passage (figure 31, 318).

With respect to claims 7 and 9, the ('109) reference shows sliding the ozone-generating device in the casing (page 5, paragraph 0063, lines 11-14 and lines 26-31). The ('109) reference includes electrical connections (page 5, paragraph 0062, lines 33-39) including UV lamp assembly such that a chip is an inherent structure of electrical components, for example, electrical circuits.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al (US 2002/0098109 A1).

With respect to claim 2, the ('109) reference shows a power supply cable (figure 19, 106) that is capable of being connected to a vehicle cigarette lighter since on page 14, paragraph 0106, the reference teaches using the vehicle as a source of power and also teaches that any source of power within the vehicle can be use. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to use the cigarette lighter as a source of power since the ('109) reference teaches using any source of power within the car.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al (US 2002/0098109 A1).

With respect to claim 5, the ('109) fails to explicitly teach placing a filtering net in the outlet section of the device. However, the ('109) reference teaches that a filter can be placed in any location within the system (page 23, paragraph 0156). Thus, Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place a filter in the outlet section of the device since the ('109) reference teaches that any location within the system is suitable for placing a filter.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al (US 2002/0098109 A1) in view of Kurtz et al (U.S.P.N. 5,660,719).

The teachings of the ('109) reference have previously been set forth with respect to claims 1, 3-4, 7 and 9. However, with respect to claim 8, the ('109) reference teaches that the power source can be switched from an AC source to a DC source (page 11, paragraph 0091), but fails to teach the concept of using a power supply switch. The ('719) reference, which is in the art of irradiating fluids using UV lamps, teaches the use of an AC/DC convertor (col.8, lines 22-24). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify device of the ('109) reference to include an AC/DC convertor as disclosed in the ('719) reference since such a modification is a matter of choice of the artisan.

Allowable Subject Matter

11. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Von Glehn (U.S.P.N. 5,681,374), the Soremark (U.S.P.N. 5,961,920) and the Hollander (U.S.P.N. 5,334,347) all teach the concept of having a UV lamp within an air vent for sterilizing air.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit: 1744

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Patent Examiner
AU 1744
09/23/2004

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